

CLAIMS

1. A control knob (1) of the retractable type for an electrical household appliance comprising: a hub, which, in use, can be angularly connected, in a seat that is open at the front of the household appliance, on a rotatable control pin of the household appliance designed to control, on the basis of its own angular position, at least one function of the household appliance; a grip, which is carried so that it is angularly fixed but can slide axially and with the interposition of elastic means on a first end of the hub opposite to a second end thereof provided for connection with said pin; and means for selective axial connection of the grip to the hub, said means being designed to block the grip in one first axial position, in which the grip projects in cantilever fashion from the first end of the hub and is set, in use, at least partially outside said seat, and in a second axial position, in which the grip is fitted on said hub and is retracted, in use, within said seat; said knob being characterized in that the grip and the hub are shaped so as to define between them a closed chamber having a volume that is a function of the axial position of the grip on the hub, and in that, in combination, between the hub and the grip, there are set sliding seal means for sealing said air-tight chamber; a calibrated restriction being moreover carried by anyone of said hub and said grip for permanently connecting the inside of said chamber with the external environment in such a way as to cause a variation in pressure of the air contained in said chamber as a result of an axial movement of the grip with respect to the hub.

2. The knob according to Claim 1, characterized in that said grip is cup-shaped, with the concavity facing said hub, and in that said first end of said hub is provided at the front with a blind hole, which is engaged, with radial play, by a rod carried fixed to said grip and extending axially in cantilever

fashion therein; a free end of said rod carrying an annular fluid-tight gasket with radial seal slidably co-operating with a side wall of said blind hole so that the latter, together with said free end of the rod, defines said chamber having a volume that depends upon the axial position of the grip on the hub.

3. The knob according to Claim 2, characterized in that an end wall of said blind hole is formed by a separating diaphragm with a fitting seat, which is designed to receive, in use, said control pin of the household appliance and is made at the front inside said second end of the hub; said end wall of the blind hole being provided with a calibrated through hole designed to enable, with a pre-set pressure drop, passage of environmental air away from and into said chamber through said connecting seat.

4. The knob according to Claim 2, characterized in that said cup-shaped grip further comprises a sleeve, which extends axially in cantilever fashion inside the grip, in a direction coaxial to said rod, and slidably fitted on an outer side surface of the hub in order to guide axial sliding movement of the grip with respect to the hub; said first end of the hub having, on the side facing to said grip, a cylindrical portion of small diameter, on which there is fitted a helical spring housed inside said sleeve and set pack-tightened between an axial shoulder of the hub and an end wall of the cup-shaped grip.

5. The knob according to Claim 1, characterized in that said radial-sealing gasket is a bell-shaped lipped gasket having its concavity facing the grip.

6. The knob according to Claim 5, characterized in that said lipped gasket is fixed at the front in cantilever fashion to said free end of said rod via connection means such as a

screw.

7. The knob according to Claim 5, characterized in that said lipped gasket is carried by said free end of said rod inserted  
5 by snap-action in a radial annular seat made thereon.

8. The knob according to Claim 1, characterized in that said rod and said sleeve are made in a single piece by means of a connecting portion so as to form a single element for  
10 connection to the hub, said connection element being fixedly mounted by snap-action within a sleeve-like seat of the cup-shaped grip, said seat being provided in cantilever fashion inside said grip.